



The Ultimate Lubricant

909

SUPER ENGINE OIL ADDITIVE:

Probably the most important, yet least understood ingredient of most modern engine oils are the additives that are included in the oil itself. Most additives fall into one of two main categories. One category of detergent-type additives contains phosphorus, sulfur or chlorine derivatives and the other contains proportions of heavy oil. Omega 909 is unique in that it does not fall into either category but instead uses a completely new and advanced chemical action that is superior to both.

ORDINARY OIL ADDITIVES:

At present, the major oil companies market their engine oils under a multitude of types but all of them fall into one of the two above categories. Their marketing people make up scientific

sounding terms to describe what are basically detergent-type additives or heavy oil additives.

Although the phosphorus, sulfur and chlorine containing additives do keep crankcases free of gumming and carbon deposits through their detergent action, during their breakdown immediately afterwards, they form highly corrosive elements that in turn attack the internal engine part metals, causing premature failure of pistons, valves and rings.

The second category of engine oil additives is nothing more than the addition of a heavier grade of low viscosity oil, which is included in the belief that 'a heavy oil in the engine oil is a good thing'. However, no scientific proof exists to substantiate such an unscientific second guess.

OMEGA 909 SUPER ACTING ADDITIVES:

Many of the better engine oils include three or four useful additives. Omega 909 super engine oil additive contains twenty-two. Six of the more important ones are:-

1. **Viscosity Index Improvers:** The Omega 909 V.I. (Viscosity Improver) consists of a carefully balanced synthetic oligomer which displays all the advantages of both monomer and polymer V.I.'s, with none of the disadvantages. The Omega 909 oligomer spreads out the viscosity capability of the parent engine oil over a wider operating range that is inherent in the parent oil viscosity. This improves the cold start engine protection of the parent oil while at the same time, keeping the parent oil from thinning out when the engine temperature rises to operating temperature. What this means to the user is less initial start wear on cold engine parts and better lubrication when the engine reaches its normal operating range.
2. **Detergency Modifiers:** Most engine oil additives use metal soaps to impart detergency to the oil and, to break up oil oxidation by-products, which form a grimy sludge in engine crankcases. However, these same detergent additives also form an acidic by-product, which in turn corrodes the engine parts. Omega 909 employs a non-metal, ashless type of detergent composed of polymerized olefins. This metal-free additive is also effective in maintaining cleanliness in the ring zone thereby eliminating ring and valve sticking problems. The 'free ring action' and proper piston ring operation at all times, ensures lowered oil consumption and eliminates combustion stroke blow-by, thereby giving maximum engine power.
3. **Superior Dispersants:** In stop and start engine operations, the detergents in ordinary engine oils do not do a very good job of dispersing the oxidation by-products in the oil (that are part of the engine wear characteristics). These tend to accumulate and hence form a sticky residue that tends to be heat-lacquered to form a varnish coating on engine parts. This action in turn causes engine hotspots and gradually leads to engine failure due to localized overheating. Omega 909

employs a polymer in which a nitrogen-containing monomer is present, having a surface action conducive to the attraction of polar constituents of the sludge-forming products. This keeps metallic wear residues in suspension, to be easily flushed away with an oil change. In turn, Omega 909 protects all engine parts from the high wear rates inherent to stop and start engine operations.

4. Oxidation Inhibitors: Omega 909 contains an advanced antioxidant that acts in the dual role of an inhibitor and metal deactivator. In a normal engine, a chemical reaction occurs when petroleum lubricating oils are exposed to oxygen-bearing materials such as air and water. This oxidation is accelerated by an increase in temperature, aeration and the presence of catalytic metals. A by-product known as hydroperoxide is produced by the combination of oxygen and hydrocarbons (as in petroleum products). They form a chain reaction which ultimately produces sludge, gum, varnish, lacquer, carbon deposits and acidic compounds. Omega 909's antioxidant agents (a) decompose the peroxides, (b) act as a metal deactivator, (c) inhibit oil oxidation (d) inhibit corrosion and (e) reduce wear.
5. Corrosion Inhibitors: Corrosion of engine parts is caused by the acids formed during the process of oil oxidation and hydrocarbon combustion. Omega 909 contains a coating lubricant that displays an affinity to metal and thereby plates all metal parts coming into contact with the engine oil to protect the parts from acid action.
6. Friction Modifiers: Omega 909 contains an advanced saponifiable oil that forms a super oily film over treated parts. This imparts super wettability (or oiliness) to the engine parts, reducing frictional drag and therefore lessening the initial starting torque required in stop and go city driving. This in turn improves engine fuel consumption and lessens engine parts wear.

SUPERIOR ADDITIVES MEAN SUPERIOR PERFORMANCE:

Motor oils are only as good as the ingredients that go into their make-up. Many engine oils today use inferior quality additives or minimal amounts of costly additives to ensure their product is competitive with other ordinary engine oils. These low cost/low performance additives cause the oil to deteriorate the moment they are called on to operate in an engine.

Omega 909 gives engine oils the expensive, high performance additives that they need in order to give superior engine performance. However, even the superior quality additives in Omega 909 can only go to work effectively when added to a good motor oil. It cannot be expected to perform its additive function in an oil of inferior or low grade quality.

HOW TO APPLY:

Omega 909 can be added directly to the existing motor oil although it is preferable for use with either a new or only slightly used oil. It should never be introduced for use with an engine oil that is nearing the end of its useful service life.

For All Vehicles: Add Omega 909 in the ratio 1 part Omega 909 to 20 parts engine oil.

Replenishment: Since most vehicles burn off some of the engine oil in the sump, the engine oil may have to be topped up occasionally. Omega 909 should be added in the same proportion as the topping up engine oil to maintain its performance. If 1-litre of engine oil is added to top up, then 50-ml (1:20) of Omega 909 should also be added to the engine sump.

It is advisable to premix Omega 909 with the correct quantity of engine oil before adding to the engine. If adding directly to an engine, Omega 909 must be added slowly while the engine is idling.

SAFETY DATA SHEET



Product name: Omega 909
Supersedes date: 2017-08-06
Product No.:

Page: 1/9
Last revised date: 2019-04-01
SDS-ID: GB-EN/5.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Omega 909
Container size: 325 ml, 5 l, 20 l **Manufactured in USA**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Additive for motor oil.

1.3. Details of the supplier of the safety data sheet

Supplier: EU importer: Sovereign Lubricants (UK) Ltd, Crowtrees Lane,
Rastrick, West Yorkshire, HD6 3LZ
T: 01484 718674 - F: 01484 400164
enquiries@sovereign-omega.co.uk
www.sovereign-omega.co.uk

Manufacturer: ITW PP & F Korea Limited.
13th Fl., Unit B, PAX Tower
609 Eonju-ro, Gangnam-gu
Seoul, Korea 06108
Tel:+82-2-2088-3560
Fax:+82-2-513-3567
www.magnagroup.com

1.4. Emergency telephone number

Emergency telephone: NHS: 111

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP: The product is not classified.

2.2. Label elements

None.

2.3. Other hazards

Other: Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema, skin cracking and oil acne. Degreasing to skin. The harmful effects may increase in used oil.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: mineral oil and additives.

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure. All substances in the product are either registered or exempt from registration under REACH.

SAFETY DATA SHEET

Product name:	Omega 909	Page:	2/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Move into fresh air and keep at rest. In case of persistent throat irritation or coughing or after inhalation of oil mist: Seek medical attention and bring along these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Small fires: Extinguish with carbon dioxide or dry powder.
Larger fires: Extinguish with foam, carbon dioxide or dry powder.
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards: During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SAFETY DATA SHEET

Product name:	Omega 909	Page:	3/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid inhalation of oil mist and contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Absorb spillage with oil-absorbing material. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

References: For personal protection, see section 8.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid prolonged and repeated contact with oil, particularly used oil. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

Technical measures: Use work methods which minimise oil mist production.

Technical precautions: When working with heated oil, mechanical ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container.

7.3. Specific end use(s)

Specific use(s): Lubricant.

SAFETY DATA SHEET

Product name:	Omega 909	Page:	4/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

<u>Engineering measures:</u>	Provide adequate ventilation and minimise the risk of inhalation of vapours and oil mist. Provide access to washing facilities incl. soap, skin cleanser and fatty cream.
<u>Personal protection:</u>	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<u>Respiratory equipment:</u>	In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P3) can be used.
<u>Hand protection:</u>	Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Breakthrough time: > 4h; Thickness: > 0.3 mm Other types of gloves can be recommended by the glove supplier.
<u>Eye protection:</u>	Risk of contact: Wear goggles/face shield.
<u>Skin protection:</u>	Wear apron or protective clothing in case of splashes.
<u>Hygiene measures:</u>	Wash hands after contact. Wash contaminated clothing before reuse.
<u>Environmental Exposure Controls:</u>	Not available.

SAFETY DATA SHEET

Product name:	Omega 909	Page:	5/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	Amber-coloured liquid
<u>Odour:</u>	Petroleum.
<u>pH:</u>	Not relevant
<u>Boiling point:</u>	Not available
<u>Flash point:</u>	165°C
<u>Evaporation rate:</u>	Not available.
<u>Flammability (solid, gas):</u>	Not applicable.
<u>Explosive limits</u>	Not available
<u>Vapour pressure:</u>	Not available
<u>Vapour density:</u>	Not available.
<u>Relative density:</u>	0,7
<u>Solubility:</u>	Insoluble in water.
<u>Partition coefficient (n-octanol/water):</u>	Not available.
<u>Auto-ignition temperature (°C):</u>	Not available.
<u>Decomposition temperature (°C):</u>	Not available.
<u>Viscosity:</u>	1125 cSt (100°C)

9.2. Other information

<u>Other data:</u>	Not available.
--------------------	----------------

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

<u>Reactivity:</u>	Not reactive.
--------------------	---------------

10.2. Chemical stability

<u>Stability:</u>	Stable under normal temperature conditions.
-------------------	---

10.3. Possibility of hazardous reactions

<u>Hazardous Reactions:</u>	None known.
-----------------------------	-------------

10.4. Conditions to avoid

<u>Conditions to avoid</u>	Heat, sparks, flames.
----------------------------	-----------------------

10.5. Incompatible materials

<u>Incompatible materials:</u>	Strong oxidising substances.
--------------------------------	------------------------------

10.6. Hazardous decomposition products

<u>Hazardous decomposition products:</u>	None in particular.
--	---------------------

SAFETY DATA SHEET

Product name:	Omega 909	Page:	6/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The harmful effects may increase in used oil.

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.

Skin contact: Degreasing. Prolonged or frequent contact may cause redness, itching, irritation, eczema, skin cracking and oil acne.

Eye contact: Splashes may irritate.

Ingestion: May irritate and cause malaise.

Specific effects: Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: Oil spills are generally hazardous to the environment.

12.2. Persistence and degradability

Degradability: The product is expected to be slowly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: No data available.

12.6. Other adverse effects

Other adverse effects: None known.

SAFETY DATA SHEET

Product name: Omega 909

Page: 7/9

Supersedes date: 2017-08-06

Last revised date: 2019-04-01

Product No.:

SDS-ID: GB-EN/5.0

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 13 02 05

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN-No: -

14.2. UN proper shipping name

Proper Shipping Name: -

14.3. Transport hazard class(es)

Class: -

14.4. Packing group

PG: -

14.5. Environmental hazards

Marine pollutant: -

Environmentally Hazardous substance: -

14.6. Special precautions for user

Special precautions: -

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: -

SAFETY DATA SHEET

Product name:	Omega 909	Page:	8/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, with amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

The Control of Substances Hazardous to Health Regulations 2002 (S.I. 2002 No. 2677) with amendments.

EH40/2005, Workplace exposure limits 2005, with amendments.

The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical Safety Assessment

CSA status: No information available.

SAFETY DATA SHEET

Product name:	Omega 909	Page:	9/9
Supersedes date:	2017-08-06	Last revised date:	2019-04-01
Product No.:		SDS-ID:	GB-EN/5.0

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Handling of used oils:

Protect health - avoid prolonged and repeated skin contact. Wash with soap and water. Protect the environment - do not pollute drains, water courses or the soil. Contact your local authority for any used oil disposal instructions.

The following sections contain revisions or new statements: 3, 8, 11, 16

Omega Manufacturing Division
13th floor, Unit B, PAX Tower, 609 Eonju-ro,
Gangnam-Gu, Seoul, Korea 06108
Tel : +82-2-2088-3560
Fax : +82-2-513-3567
Web site : www.magnagroup.com

The Omega Trade Mark is the property of ITW, Inc., and is used under license by ITW PP & F Korea Limited.

Abbreviations and acronyms PBT = Persistent, Bioaccumulative and Toxic.
used in the safety data sheet: vPvB = very Persistent and very Bioaccumulative.

Key literature references and sources for data: None.

Additional information: None.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
www.dhigroup.com.
